

Award Number: W81XWH-12-1-0090

TITLE: Relationship Factors Contributing to the Progression of Combat Related PTSD and Suicidality over Time

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REPORT DATE: April 2016

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

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REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE April 2016		2. REPORT TYPE Annual		3. DATES COVERED 2 Mar 2015 -28 Feb 2016	
4. TITLE AND SUBTITLE Relationship Factors Contributing to the Progression of Combat-Related PTSD and Suicidality Over Time.				5a. CONTRACT NUMBER W81XWH-12-1-0090	
				5b. GRANT NUMBER 12348001	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Elizabeth S. Allen, PhD E-Mail: Elizabeth.Allen@ucdenver.edu				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) University of Colorado Denver Campus Box 173 1200 Larimer Street Denver, CO 80217-3364				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution Unlimited					
13. SUPPLEMENTARY NOTES					
14. The RAMP project is designed to examine the key social context of intimate romantic relationships of active duty Army soldiers, and how interpersonal processes in this type of relationship can affect psychological functioning over time. The ultimate goal of this knowledge will be to enhance existing programs and therapies for military couples. This study consists of online surveys, which are completed by active duty Army males recently returned from a deployment, along with their significant romantic partner. The study consists of a total of 5 surveys each for the service members and their female partners. During this report period, we completed data collection for Surveys 3 and 4, and Survey 5 is expected to be complete in May 2016. After screening potential participants, we invited 716 couples to complete Survey 1. Of those invited, 593 couples participated in Survey 1, which is an 83% response rate. After screening the initial sample for various factors, 281 couples were invited into Surveys 2 through 5. Response rates (on the individual level) are 98% for Survey 2, 94% for Survey 3, and 93% for Survey 4. Survey 5 is ongoing, but the current response rate (on the individual level) is 88%. Initial preliminary analyses have begun. We have presented or been accepted for presentation 11 posters and 4 talks at regional or national conferences, and have additional symposium presentations under consideration for future conferences. We have not published findings yet.					
15. SUBJECT TERMS Relationships, military, couples, active-duty, operation enduring freedom (OEF), posttraumatic stress disorder (PTSD), couples adaptation and stress processes, suicide risk					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U			USAMRMC
			UU	9	19b. TELEPHONE NUMBER (include area code)

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Introduction

This report highlights the progress and accomplishments of “Relationship Factors Contributing to the Progression of Combat Related PTSD and Suicidality Over Time” during our fourth year of funding from March 2, 2015 to March 1, 2016. Please note that the public title we have selected for use in IRB review, with our participants, and throughout this report is the “Relationships Among Military Personnel (RAMP) Project”. The RAMP project is designed to examine the key social context of intimate romantic relationships of active duty Army soldiers, and how interpersonal processes in this type of relationship can affect psychological functioning over time. The ultimate goal of this knowledge will be to enhance existing programs and therapies for military couples. This study consists of online surveys that are completed by active duty Army males recently returned from a hardship deployment, along with their significant romantic partner. Upon completion of the study, a total of 5 surveys will be administered to these couples during approximately an 18 month time span.

The RAMP Project officially opened to participants on June 17, 2013. During this report period, we completed data collection for Surveys 3 and 4, and anticipate completing data collection for our final Survey 5 in May 2016. Primarily due to the initial setbacks in recruitment that led to a delay in enrolling participants, we completed a request for a second No Cost Extension (NCE) year, including an updated scope of work, federal financial report, worksheet detailing how we will spend the remainder of the funding, and a cover letter to TATRC/ USAMRMC to extend the project for 12 months (through 02-28-17). We received subsequent approval for the second NCE, which will take place from March 1, 2016 – February 28, 2017.

We continue to maintain an active research team, including volunteer undergraduate research assistants, staff, and subcontracted consultants and co-investigators. The team continues to refine and maintain detailed protocols for data checking, downloading, and cleaning, and ethics training for all study personnel (e.g., general human subjects certification, documented agreement to specific ethical practices regarding this study). The study has received annual approval from COMIRB and HRPO for our continued efforts. Initial dissemination efforts continue, including presenting three poster submissions and four symposium submissions at the 2015 Association of Behavioral and Cognitive Therapies (ABCT) conference (see References).

The specific aims for the RAMP project are:

- Aim 1:** To examine couple and partner responses to PTSD symptoms, and how these responses affect PTSD, relationship functioning, and psychological risk factors for suicide over time.
- Aim 2:** Examine additional PTSD and relationship predictors of psychological risk factors for suicide.
- Aim 3:** Assess mechanisms of the relationship between PTSD and relationship functioning over time.
- Aim 4:** Determine adaptive and maladaptive patterns of communication regarding combat.

Body

In our approved Statement of Work, we proposed eight general task categories to accomplish our specific aims:

1. Hiring and orientation of project staff, purchasing and installing equipment
2. Finalizing initial item pool
3. Creating IRB applications, obtaining initial IRB approval, and maintaining compliance
4. Finalizing surveys
5. Developing and maintaining study materials and infrastructure
6. Recruitment
7. Executing online surveys
8. Analysis and dissemination

A narrative of significant accomplishments, issues encountered, and synopsis of key milestones for each quarter related to these SOW task categories 1-8 are provided in Sections I – IV. Following these quarterly

narratives, bulleted lists of key accomplishments are provided in the next section, *Key Accomplishments*, which are organized by task category and quarter.

I. First Quarter (March 2, 2015 – June 30, 2015)

During this quarter, we launched Survey 5 and completed Survey 3. We received acknowledgment of acceptance for three poster submissions and four symposium submissions to the 2015 Association of Behavioral and Cognitive Therapies (ABCT) conference.

Key milestones this quarter:

- **FY15, Yr4, Q1, 03-20-15:** Survey 5 launched.
- **FY15, Yr4, Q1, 05-25-15:** Survey 3 now complete.
- **FY15, Yr4, Q1, 05-29-15:** Received acknowledgment of acceptance for three poster submissions and four symposium submissions to the 2015 Association of Behavioral and Cognitive Therapies (ABCT).

II. Second Quarter (July 1, 2015 – September 30, 2015)

During this quarter, we received subsequent approval to conduct research for another year, through September 16th, 2016. Surveys 1-3 are complete, and Surveys 4 and 5 are ongoing.

Key milestones this quarter:

- **FY15, Yr4, Q2, 09-22-15:** Received certificate of approval from COMIRB to continue conducting research for another year, through 09-16-16.

III. Third Quarter (October 1, 2015 – December 31, 2015)

During this quarter we completed Survey 4, and Survey 5 is ongoing. We completed subcontract renewals for all four of the subcontractors on this project. We presented three posters and four symposium presentations at the 2015 Association of Behavioral and Cognitive Therapies (ABCT). We submitted four poster submissions and one symposium submission to the 2016 American Psychological Association (APA) Conference. We also submitted a second No Cost Extension (NCE) request, including an updated scope of work, federal financial report, projected budget, and a cover letter explaining the need to extend the project for 12 months (through 02-28-17).

Key milestones this quarter:

- **FY15, Yr3, Q3, 10-7-15:** Completed subcontract renewals for all four of the subcontractors on this project.
- **FY15, Yr4, Q3, 10-24-15:** Survey 4 is now complete.
- **FY15, Yr4, Q3, 11-15-15:** Presented three posters and four symposium presentations at the 2015 Association of Behavioral and Cognitive Therapies (ABCT).
- **FY15, Yr4, Q3, 12-01-15:** Submitted four poster submissions and one symposium submission to the 2016 American Psychological Association (APA) Conference.
- **FY15, Yr4, Q3, 12-22-15:** Submitted a second No Cost Extension (NCE) request to extend the project for 12 months (through 02-28-17).

IV. Fourth Quarter (January 1, 2016 – March 1, 2016)

During this quarter, we received approval for a second No Cost Extension, from 3-1-16 through 2-28-16. We also received approval for four poster submissions and one symposium submission to the 2016 American Psychological Association (APA) Conference. We submitted two symposium abstracts to the 2016 Association of Behavioral and Cognitive Therapies (ABCT). We brought on an additional research assistant to assist with data cleaning and syntax building. Survey 5 is ongoing.

Key milestones this quarter:

- **FY15, Yr4 Q4, 01-25-16:** Received approval for four poster submissions and one symposium submission to the 2016 American Psychological Association (APA) Conference.

- **FY15, Yr4 Q4, 02-09-15:** Received approval for a second No Cost Extension from 3-1-16 through 2-28-17.
- **FY15, Yr4 Q4, 02-19-15:** One new Research Assistants (RA) oriented and trained.
- **FY15, Yr4, Q4, 03-01-16:** Submitted two symposium submissions to the 2016 Association of Behavioral and Cognitive Therapies (ABCT).

Key Research Accomplishments

Below are our key accomplishments, organized by task category and then quarter.

Table 1. Hiring and orientation of project staff, purchasing and installing equipment.

First Quarter	<ul style="list-style-type: none"> • Oriented one additional volunteer Research Assistant (RA). • All RAs who join the project complete CITI human subjects training and a confidentiality and ethical agreement for the lab. All are under the oversight of the PI and GRAs and all training has been supplemented with regular meetings with core staff.
Second Quarter	<ul style="list-style-type: none"> • Oriented two additional volunteer Research Assistants.
Third Quarter	<ul style="list-style-type: none"> • No new staff. • Renewed all subcontracts through February 2016.
Fourth Quarter	<ul style="list-style-type: none"> • Oriented one additional volunteer Research Assistant.

Table 2. Finalizing the initial item pool. -

First Quarter	<ul style="list-style-type: none"> • This task completed in prior periods.
Second Quarter	<ul style="list-style-type: none"> • This task completed in prior periods.
Third Quarter	<ul style="list-style-type: none"> • This task completed in prior periods.
Fourth Quarter	<ul style="list-style-type: none"> • This task completed in prior periods.

Table 3. Creating IRB applications, obtaining initial IRB approval, and maintaining compliance.

First Quarter	<ul style="list-style-type: none"> • No IRB amendments or approvals needed during this quarter. • In all quarters, staff continues to maintain compliance with ethical and standards of the lab and IRB.
Second Quarter	<ul style="list-style-type: none"> • COMIRB approval to conduct research for another year, through 09-16-16.
Third Quarter	<ul style="list-style-type: none"> • No IRB amendments or approvals needed during this quarter.
Fourth Quarter	<ul style="list-style-type: none"> • No IRB amendments or approvals needed during this quarter.

Table 4. Finalizing surveys for Phase 1 and Phase 2.

First Quarter	<ul style="list-style-type: none"> • Survey 1 – 3 complete. • Survey 4 ongoing. • Surveys 5 launched in March 2015 and ongoing.
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Second Quarter	<ul style="list-style-type: none"> • Survey 1 – 3 complete. • Survey 4 and 5 ongoing.
Third Quarter	<ul style="list-style-type: none"> • Survey 1 – 4 complete. • Survey 5 ongoing.
Fourth Quarter	<ul style="list-style-type: none"> • Survey 1 – 4 complete. • Survey 5 ongoing.

Table 5. Developing and maintaining study materials and infrastructure.

First Quarter	<ul style="list-style-type: none"> • Continue to work and maintain relationships with gift card vendors to ensure proper and timely payment to our participants. • Continue to check all data downloads from Qualtrics to SPSS. • Continue to create and implement decision rules to ensure proper cleaning and scoring of data. • Continue to document all measures and methods employed throughout the study.
Second Quarter	<ul style="list-style-type: none"> • Continue processes documented above.
Third Quarter	<ul style="list-style-type: none"> • Continue processes documented above.
Fourth Quarter	<ul style="list-style-type: none"> • Continue processes documented above.

Table 6. Recruitment.

First Quarter	Complete. We continue to work to <u>retain</u> high levels of participation, including reminders and incentives to participate, responding to all participant questions, and ensuring timely completion of participant payments.
Second Quarter	Complete. Continue processes documented above.
Third Quarter	Complete. Continue processes documented above.
Fourth Quarter	Complete. Continue processes documented above.

Table 7. Executing online surveys.

First Quarter	<ul style="list-style-type: none"> • As of June 30th, 2015: 1432 individuals were fully qualified and have been sent Survey 1 invitations, 1267 individuals (593 matched couples) participated in Survey 1. 562 Survey 2 invitations have been sent (281 couples), 550 individuals (271 couples) participated in Survey 2. 556 Survey 3 invitations have been sent (278 couples), 524 individuals (248 couples) participated in Survey 3. 355 Survey 4 invitations have been sent (177 couples), and 318 individuals (146 couples) have participated in Survey 4. 120 Survey 5 invitations have been sent (60 couples), 92 individuals (43 couples) have participated in Survey 5. • Processes for identifying noncompleters, duplicates, invalid responding are ongoing through all quarters.
Second Quarter	<ul style="list-style-type: none"> • As of September 30th, 2015: 1432 individuals were fully qualified and have been sent Survey 1 invitations, 1267 individuals (593 matched couples) participated in Survey 1. 562 Survey 2 invitations have been sent (281 couples), 550 individuals (271

	couples) participated in Survey 2. 556 Survey 3 invitations have been sent (278 couples), 524 individuals (248 couples) participated in Survey 3. 556 Survey 4 invitations have been sent (277 couples), and 502 individuals (233 matched couples) have completed Survey 4. 189 Survey 5 invitations have been sent (94 couples), 160 individuals (74 matched couples) have completed Survey 5.
Third Quarter	<ul style="list-style-type: none"> As of December 31st, 2015: 1432 individuals were fully qualified and have been sent Survey 1 invitations, 1267 individuals (593 matched couples) participated in Survey 1. 562 Survey 2 invitations have been sent (281 couples), 550 individuals (271 couples) participated in Survey 2. 556 Survey 3 invitations have been sent (278 couples), 524 individuals (248 couples) participated in Survey 3. 555 Survey 4 invitations were sent (277 couples), and 517 individuals (238 matched couples) completed Survey 4. Survey 5 is in progress. 335 Survey 5 invitations have been sent (167 couples), 278 individuals (127 matched couples) have completed Survey 5.
Fourth Quarter	<ul style="list-style-type: none"> As of March 1st, 2016: 1432 individuals were fully qualified and have been sent Survey 1 invitations, 1267 individuals (593 matched couples) participated in Survey 1. 562 Survey 2 invitations have been sent (281 couples), 550 individuals (271 couples) participated in Survey 2. 556 Survey 3 invitations have been sent (278 couples), 524 individuals (248 couples) participated in Survey 3. 555 Survey 4 invitations have been sent (277 couples), and 517 individuals (238 matched couples) completed Survey 4. 516 Survey 5 invitations have been sent (258 couples), 456 individuals (210 matched couples) have completed Survey 5.

Table 8. Analysis and dissemination

First Quarter	<ul style="list-style-type: none"> Received acknowledgment of acceptance for three poster abstracts and four symposium abstracts to the Association of Behavioral and Cognitive Therapies (ABCT) 2015 conference, to be held in Chicago, IL in November 2015.
Second Quarter	<ul style="list-style-type: none"> Nothing this quarter.
Third Quarter	<ul style="list-style-type: none"> The ABCT abstracts noted above were presented. Four poster abstracts and one symposium abstract were submitted to the American Psychological Association (APA) 2016 conference.
Fourth Quarter	<ul style="list-style-type: none"> Received acknowledgment of acceptance for four poster abstracts and one symposium presentation to the American Psychological Association (APA) 2016 conference. Two symposium abstracts were submitted to the Association of Behavioral and Cognitive Therapies (ABCT) 2016 conference, to be held in New York in October 2016. Acceptance decisions will be sent out in May.

Reportable Outcomes

Three posters and four symposium talks were presented at conferences this year (see References). Employment or research opportunities received based on experience/training supported by this grant include: training and experience to two compensated Graduate Students, training and experience to four volunteer undergraduate Research Assistants this year, and subcontracts with four co-investigators. We have developed several measures for this study; our data collection will allow us to test and refine them. As of March 1, 2016, 593 couples have completed Survey 1, 271 couples have completed Survey 2, 248 couples have completed Survey 3, and 238 couples have completed Survey 4. Data collection is ongoing for Survey 5.

Conclusions

This report highlights the progress and accomplishments during the third year of funding (March 2, 2015 to March 1, 2016) for the study: “Relationship Factors Contributing to the Progression of Combat Related PTSD and Suicidality Over Time” (known as the Relationships Among Military Personnel [RAMP] Project). We completed data collection from surveys 1 - 4. Survey 5 data collection is expected to be complete in May 2016.

During this past year, we provided training and experience for 4 undergraduate Research Assistants (RAs) including CITI human subjects training, ethical and confidentiality training, weekly lab meetings, and supervision from study personnel.

We received a second no-cost extension (NCE) for March 1, 2016 – February 28, 2017.

We presented three posters and four symposium talks at the 2015 Association of Behavioral and Cognitive Therapies (ABCT). We received approval for four poster submissions and one symposium submission at the 2016 American Psychological Association (APA) Conference, to be held in August 2016. We submitted two symposium abstracts to the 2016 ABCT.

We feel prepared and confident going into Year 5 (2nd NCE year), and look forward to providing our funders with updates on the project. Thank you for the opportunity to conduct this work and share our progress.

References

- Renshaw, K. D., Allen, E. S., Fredman, S. J., & Kern, C. (2015, November). Spouses' reasons for accommodation of service members' PTSD symptoms: Links with symptom clusters and overall levels of accommodation. In S. J. Fredman (Chair), *Partner accommodation of PTSD symptoms in military and veteran couples*. Symposium presented at the 49th annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL.
- Carter, S., Renshaw, K. D., & Allen, E. (2015, November). Concurrent and prospective associations of support from romantic partner with interpersonal suicide risk factors in service members. In S. Carter (Chair), *Mechanisms of suicide risk in the context of military service members and veterans*. Symposium conducted at the 49th annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL.
- DiMauro, J., Renshaw, K. D., & Allen, E.S. (2015, November). Associations of PTSD and discrepancies between partner reports of support provided and soldier reports of support received. In J. DiMauro & K.D. Renshaw (Co-Chairs), *Social support and PTSD: Empirically-based extensions of current knowledge*. Symposium conducted at the 49th annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, Illinois.
- Kenny, J. J., Allen, E.S., Fredman, S. J., Renshaw, K. D. (2015, November). Two Perspectives on Accommodation: Partners vs. Service Members. In S. J. Fredman (Chair), *Partner Accommodation of PTSD Symptoms in Military and Veteran Couples*. Symposium conducted at the 49th annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL.
- Bhalla, A., Allen, E. S., & Renshaw, K. D. (2015, November). *An Initial Validation of the Post Deployment Couple Growth Inventory*. Poster presented at the 49th annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL.
- Kenny, J.J., Allen, E.S., Renshaw, K. D. (2015, November). *Does PTSD account for the entire relationship between combat experiences and family functioning in a military sample?* Poster presented at the 49th annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL.
- Paige, L., Renshaw, K.D., Allen, E., & Litz, B. (2015, November). *Types of deployment trauma predict help-seeking above and beyond severity of PTSD symptoms*. Poster presented at the 49th annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL.